

The Examiner notes that Rendina was relied upon merely to show a sintering step, and while Applicants similarly argue that Rendina does not show any of the alleged beneficial effects of surface oxide reduction, Mn outer surface migration or minimization of Ni and Co oxidation, the Examiner notes that these effects are outside the scope of the present claims.

Applicants note that, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Second, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Finally, there must be a reasonable expectation of success. (Manual of Patent Examining Procedure §2142). The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on Applicant's disclosure.

Applicants respectfully disagree with the above rejection, because there was no suggestion to combine the cited references in the manner put forth by the Examiner. The Examiner has presented Ise et al., which appears to show the basic structure of the particles of a hydrogen absorbing alloy, and also appears to show a heat treating step in acid. The Examiner also presents Rendina, which shows that a heat sintering step may be done for the purpose of enhancing the binding of various components of the composite. Specifically, Rendina states that,

"The principal purpose for heat treating the composite between each application of new passivating material is to **enhance the binding of** the various components of the composite to each other. It is believed that when (Q) is a metal dichalcogenide, a portion of the

dichalcogen is removed during the heating process. This may provide a more acceptable surface for the next application of (Q) to bind with. **Secondary benefits** achieved by the application of heat treatments may include, heating to remove unnecessary materials from inclusion compounds, (for example a composite with an inclusion (Y) of a metal chloride may be heated to remove the chloride and evolve the metal), heating to polymerize an inclusion material, and others.”

Therefore, Rendina may have suggested the step of sintering the material of Ise et al., **if the material of Ise et al.** was similar enough to the material of Rendina to benefit from one of the above-listed reasons for sintering. That is, if the material of Ise et al. suffered from poor binding and required additional binding, then there might be a suggestion to sinter the material of Ise et al.

On the other hand, if the material of Ise et al. was not sufficiently similar to that of Rendina to benefit from the sintering step, then there would have been no suggestion to combine the cited references.

Applicants submit that Rendina does not suggest the sintering step of the material of Ise et al. As noted above, the principal purpose for sintering according to Rendina is to enhance the binding of the various components in producing the complex. The effect of the sintering is that the binding of the components in the composites is improved because metal oxide or the like on the surface is removed and a more acceptable surface for binding is provided. Another effect is to remove unnecessary materials from the composites.

On the other hand, the material of Ise et al. and the present invention is not a complex shown by Rendina, but a single hydrogen absorbing alloy having a definite composition. Therefore, the

binding of the various components is not necessary. The principal purpose for sintering the material of the present invention is to move manganese which is contained in the hydrogen absorbing alloy and which is easily oxidized to the surface of the alloy by heat treatment. As a result, active metal nickel or metal cobalt deposited on the surface of the hydrogen absorbing alloy is prevented from being oxidized and inactivated for the effect of manganese thus moved to the surface. The secondary effects of the sintering according to the present invention are that the oxide on the surface of the alloy particles is reduced, and that the contact resistance between the alloy particles is reduced by welding the alloy particles together. There is no suggestion in Rendina or Ise et al. to achieve these effects, and these effects are not concerned with the enhancement of the binding.

For at least the above reasons, Applicants submit that the present invention is patentably distinguished and not obvious in light of the cited references. Applicants earnestly request withdrawal of the rejections and passage of the claims to issue.


If the Examiner believes that this application is not now in condition for allowance, the Examiner is requested to contact Applicants' undersigned attorney at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

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U.S. Patent Application Serial No. 09/701,512

In the event that this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees which may be due with respect to this paper, to Deposit Account No. 01-2340.

Respectfully submitted,
ARMSTRONG, WESTERMAN & HATTORI, LLP


Kenneth H. Salen
Attorney for Applicants
Reg. No. 43,077

KHS/kas
Atty. Docket No. 001431
Suite 1000, 1725 K Street, N.W.
Washington, D.C. 20006
(202) 659-2930



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